## Part I

## Estimates, Units, and Percentages

EUAP1.tex **Exercise** 1 How many inches are in a mile?  $\boxed{63360}$  inches = 1 mile EUAP2.tex **Exercise 2** How many yards are in a mile? 1,760 yards= 1 mile EUAP3.tex **Exercise 3** How many tablespoons are in a gallon? | 256 | tablespoons = 1 gallon EUAP4.tex **Exercise 4** How many cups of gasoline could fit into a 15 gallon tank? | 240 | cups = 15 gallons EUAP5.tex **Exercise** 5 How many centimeters are in a kilometer? |100000| cm = 1 km EUAP6.tex **Exercise 6** 53 dekaliters is how many milliliters? |530000| mL = 53 daL

<b>Exercise 7</b> How many decigrams are in a hectogram? $\boxed{1000}$ dg= 1 hg
EUAP8.tex
<b>Exercise 8</b> How many millimeters are in a decimeter? $\boxed{100}$ mm = 1 dm
EUAP9.tex
<b>Exercise 9</b> You go to a restaurant and end up with a bill for \$13.78. How much is a 20% tip? How much is an 18% tip? $20\% = \$2.76 \ 18\% = \$2.48$
EUAP10.tex
<b>Exercise</b> 10 You have a coupon for 30% off and want to buy an item that is \$48.98.
How much money will you save? \$\[ 14.69 \] How much money will you pay? \$\[ 34.29 \]
EUAP11.tex
<b>Exercise 11</b> A paper company advertises on their box of 20 reams of printer paper that it is "99.99% jam free." How many sheets of paper would you expect to lose, assuming when a paper jam happens, you "lose" that jammed piece of paper? (A ream of paper is 500 sheets). 1 sheet(s) will jam
EUAP12.tex
<b>Exercise 12</b> Suppose 485 people arrived at and event before 10 am. By the end of the event, we know there had been 1,673 total event attendees. What percent of the attendees arrived before 10 am? 29 %

EUAP13.tex

**Exercise** 13 After a garage sale, you see that 35% of what was sold was old records. If 14 records were sold, how many total items were sold at the sale? 40

## EUAP14.tex

**Exercise 14** A student is conducting a survey for his/her statistics class. He/She decides to poll 20% of the 1200 full-time students on campus and 40% of the 4000 part-time students. What percent of the total student population did the student survey?  $\boxed{35.4}$ %

## EUAP15.tex

**Exercise 15** A shop owner raises the price of a \$100 pair of shoes by 50%. After a few weeks, because of falling sales, the owner reduces the price of the shoes by 50%. What is the new price of the shoes (after both percent changes have occurred)?  $\{ 75 \}$